

## Exhibit 300: Capital Asset Summary

### Part I: Summary Information And Justification (All Capital Assets)

#### Section A: Overview & Summary Information

**Date Investment First Submitted:** 2010-03-19  
**Date of Last Change to Activities:** 2011-09-30  
**Investment Auto Submission Date:** 2012-02-27  
**Date of Last Investment Detail Update:** 2011-09-16  
**Date of Last Exhibit 300A Update:** 2012-02-27  
**Date of Last Revision:** 2012-03-19

**Agency:** 029 - Department of Veterans Affairs      **Bureau:** 00 - Agency-Wide Activity

**Investment Part Code:** 01

**Investment Category:** 00 - Agency Investments

**1. Name of this Investment:** Medical 21st Century Bar Code Expansion(BCE)

**2. Unique Investment Identifier (Ull):** 029-555555111

#### Section B: Investment Detail

- 1. Provide a brief summary of the investment, including a brief description of the related benefit to the mission delivery and management support areas, and the primary beneficiary(ies) of the investment. Include an explanation of any dependencies between this investment and other investments.**

The Bar Code Expansion investment will help the Department of Veterans Affairs (VA) remedy errors caused by patient misidentification or mislabeling of laboratory specimens. Patient misidentification through mislabeled specimens for the clinical laboratory, anatomic pathology and the administration of incorrect blood products have led to adverse patient events. The Bar Code Expansion-Positive Patient Identification (BCE-PPI) Project will utilize bar code scanning technology, commonly used in private sector healthcare facilities, for the administration of all blood products and for the collection of all types of laboratory specimens in VA Medical Centers. The collection of a properly labeled laboratory specimen from the correct patient is absolutely critical to ensure safe blood transfusions and accurate laboratory results. The VA National Center for Patient Safety completed a review of patient misidentification adverse events and close calls in the Root Cause Analysis (RCA) database. A total of 227 RCA cases of patient misidentification events were examined. Over 80% of reports were directly related to mislabeled specimens. Patients experienced delays in treatment for cancer and other medical conditions, repeat phlebotomy procedures, and repeat biopsies. Many patients received inaccurate pathology reports pertaining to specimens from other patients. The BCE-PPI investment will assist VA to achieve three (3) Joint Commission National Patient Safety Goals intended to improve the accuracy of patient identification, eliminate transfusion errors related to patient misidentification, and improve the effectiveness

of communication among caregivers. To implement positive patient identification at the point of care, the Wireless Infrastructure (WIR) upgrades must be implemented at each facility. The Bar Code Expansion investment also has dependencies on VistA Lab, Lab Reengineering, Computerized Patient Records System (CPRS), Bar Code Medication Administration (BCMA), VistA Blood Establishment Computer Software (VBECS), and Nursing Vitals. The BCE-PPI COTS systems will interface with these existing VA applications. Without ongoing investment in BCE, our Veterans will be subjected to potential errors that will result in unnecessary or incorrect surgical procedures or unnecessary treatments such as radiation therapy, chemotherapy, antibiotics, blood transfusions, cardiac catheterizations, or death.

**2. How does this investment close in part or in whole any identified performance gap in support of the mission delivery and management support areas? Include an assessment of the program impact if this investment isn't fully funded.**

The BCE initiative is envisioned to provide the following operational improvements: 1) increase accuracy of patient identification and tracking; 2) reduce laboratory-specimen collection errors; 3) reduce blood-transfusion errors; 4) reduce errors and decrease time spent in manual documentation of medication administrations, blood transfusions and recording of vital signs; and 5) provide caregivers (e.g. physicians, nurses, clinicians, etc.) with real-time access to up-to-date records to assist them in decision making when prescribing/administering/monitoring drugs, performing and evaluating tests, administering blood, and providing other treatments. VHA Directive 2009-035 issued July 2009 requires all facilities have in place a mechanism to track and trend the number of mislabeled specimens arriving in laboratory. Failure to fully fund this project will hamper efforts to interface with, test and deploy the Bar Code Expansion – Positive Patient Identification (BCE-PPI) Commercial off the Shelf (COTS) solution. The BCE-PPI Project will not be able to utilize bar code scanning technology, commonly used in private sector healthcare facilities, for the administration of all blood products and for the collection of all types of laboratory specimens in VA Medical Centers. The mandated applications for Transfusion Verification, Specimen Collection, and Anatomic Pathology Collection would not be delivered to the field. The inability to deliver Specimen Collection and Anatomic Pathology to the field will result in the continuation of an estimated 223,482 Specimen Collection errors and 1,064 Anatomic Pathology errors annually. The cost associated with repeating the above tests would be what is estimated to be in excess of \$700,000 annually. Patient misidentification through mislabeled specimens for the clinical laboratory, anatomic pathology and the administration of incorrect blood products have led to adverse patient events. The safety and quality of care for our Veterans will be negatively affected if this project does not get carried out.

**3. Provide a list of this investment's accomplishments in the prior year (PY), including projects or useful components/project segments completed, new functionality added, or operational efficiency achieved.**

The BCE-PPI project was in a planning phase during the prior year (PY). Subsequently, the following accomplishments were completed, laying the groundwork for national approval for the release of the BCE-PPI Ancillary Applications to 153 VA Medical facilities Milestones:

MicroTech/CareFusion Vendor Contract Awarded	Received PMAS Approval for an
"Active" Status	Completed Certification and Accreditation (C&A) Testing
Received Interim Authority to Operate (IATO)	Completed Pilot Testing in Test

Environments

Begin Regression Testing of Ancillary Applications.

**4. Provide a list of planned accomplishments for current year (CY) and budget year (BY).**

For Cy the planned accomplishments for the year include Transfer Verification interface development and pilot testing, the first phase of national deployment of Ancillary Applications and Transfusion Verification, and the beginning of interface development and pilot testing of Specification Verification. The Ancillary Applications functionality includes-expanding tools available to the nurse for use with existing VistA software for medication administration, documentation of vital signs, CPRS read only on portable devices, and the capability to automatically accept vital sign measures from compatible Vital Sign Monitors/machines (GE Dinamap) through infrared (IFR) ports. The Transfusion Verification functionality includes ensuring the blood product assigned to patient through VistA Blood Bank matches to the patient at the point of care, automates the SF-158 Blood Transfusion Record, interfaces with the VistA Blood Establishment Computes Software (VBECS) Blood Admin System, Documents 2nd verifier, interavenous fluid, tubing, vital signs, transfusion activities. For BY the planned accomplishments for the year include the continuation of the national deployment of Ancillary Applications and Transfusion Verification and the start of interface and pilot testing for Specimen Collection Verification. The Specimen Collection Verification functionality includes Print bar code labels at the point of collection, permanently associates the patient with the specimen and the clinician's order using scanning technology, and interfaces with laboratory systems. Note that the majority of the scope for BY will likely be pushed out due to funding limitations as funding becomes available we will be starting these activities for BY.

**5. Provide the date of the Charter establishing the required Integrated Program Team (IPT) for this investment. An IPT must always include, but is not limited to: a qualified fully-dedicated IT program manager, a contract specialist, an information technology specialist, a security specialist and a business process owner before OMB will approve this program investment budget. IT Program Manager, Business Process Owner and Contract Specialist must be Government Employees.**

2009-06-09

## Section C: Summary of Funding (Budget Authority for Capital Assets)

1.

Table I.C.1 Summary of Funding

	PY-1 & Prior	PY 2011	CY 2012	BY 2013
Planning Costs:	\$0.3	\$0.0	\$0.0	\$0.0
DME (Excluding Planning) Costs:	\$1.5	\$1.2	\$0.0	\$0.0
DME (Including Planning) Govt. FTEs:	\$0.4	\$0.4	\$0.5	\$0.0
Sub-Total DME (Including Govt. FTE):	\$2.2	\$1.6	\$0.5	0
O & M Costs:	\$0.0	\$0.0	\$0.0	\$0.0
O & M Govt. FTEs:	\$0.0	\$0.0	\$0.0	\$0.0
Sub-Total O & M Costs (Including Govt. FTE):	0	0	0	0
Total Cost (Including Govt. FTE):	\$2.2	\$1.6	\$0.5	0
Total Govt. FTE costs:	\$0.4	\$0.4	\$0.5	0
# of FTE rep by costs:	3	3	4	0
Total change from prior year final President's Budget (\$)		\$-8.3	\$-4.3	
Total change from prior year final President's Budget (%)		-83.56%	-90.47%	

**2. If the funding levels have changed from the FY 2012 President's Budget request for PY or CY, briefly explain those changes:**

Budget numbers continue to change due to VA-level reviews. The numbers entered for this submittal may not be final numbers. Bar Code Expansion funding levels changed significantly as the result of a directed replanning of this work through Program Management and Accountability System(PMAS) requirements for 6 month incremental delivery of software.

## Section D: Acquisition/Contract Strategy (All Capital Assets)

Table I.D.1 Contracts and Acquisition Strategy

Contract Type	EVM Required	Contracting Agency ID	Procurement Instrument Identifier (PIID)	Indefinite Delivery Vehicle (IDV) Reference ID	IDV Agency ID	Solicitation ID	Ultimate Contract Value (\$M)	Type	PBSA ?	Effective Date	Actual or Expected End Date
Awarded	3600	<a href="#">VA11810F0003</a>	VA11810BP0010	3600							
Awarded	3600	<a href="#">VA11810F0014</a>	VA11810BP0010	3600							
Awarded	3600	<a href="#">VA11810F0015</a>	VA11810BP0010	3600							

**2. If earned value is not required or will not be a contract requirement for any of the contracts or task orders above, explain why:**  
 Earned Value will be included.

## Exhibit 300B: Performance Measurement Report

### Section A: General Information

**Date of Last Change to Activities:** 2011-09-30

### Section B: Project Execution Data

**Table II.B.1 Projects**

Project ID	Project Name	Project Description	Project Start Date	Project Completion Date	Project Lifecycle Cost (\$M)
1003150605	Bar Code Expansion (BCE) Positive Patient Identification	This project implements barcode wireless technology that will enable positive patient identification at the point of care for clinical specimen collection, anatomic pathology specimen collection, and blood administration, as well as reduce adverse events associated with incorrect blood product transfusion; mislabeling of laboratory, anatomical pathology, and blood specimens; and decrease adverse events associated with surgical procedures. BCE supports the Department of Veterans Affairs Strategic Plan FY 2006 2011 Business Performance Measure Objective E.3: Percent of Laboratory specimens that are collected utilizing barcode technology.			

### Activity Summary

## Activity Summary

Roll-up of Information Provided in Lowest Level Child Activities

Project ID	Name	Total Cost of Project Activities (\$M)	End Point Schedule Variance (in days)	End Point Schedule Variance (%)	Cost Variance (\$M )	Cost Variance (%)	Total Planned Cost (\$M)	Count of Activities
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Roll-up of Information Provided in Lowest Level Child Activities

Project ID	Name	Total Cost of Project Activities (\$M)	End Point Schedule Variance (in days)	End Point Schedule Variance (%)	Cost Variance (\$M )	Cost Variance (%)	Total Planned Cost (\$M)	Count of Activities
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1003150605

Bar Code Expansion  
(BCE) Positive Patient  
Identification

## Key Deliverables

Project Name	Activity Name	Description	Planned Completion Date	Projected Completion Date	Actual Completion Date	Duration (in days)	Schedule Variance (in days )	Schedule Variance (%)
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NONE



## Section C: Operational Data

Table II.C.1 Performance Metrics

Metric Description	Unit of Measure	FEA Performance Measurement Category Mapping	Measurement Condition	Baseline	Target for PY	Actual for PY	Target for CY	Reporting Frequency
Each Project in this investment will measure the number of planned project customer acceptances/sign-off for project artifacts, against the number of actual project customer acceptances/sign-off for project artifacts required under the Program Management and Accountability System (PMAS).	Percentage	Process and Activities - Quality	Over target	100.000000	100.000000	100.000000	100.000000	Quarterly
Each project comprising this investment is responsible for timely execution of its allocated FY budget to fulfill Agency mission and goals for budget forecasting and execution. This metric will measure 100% of the investment's planned FY budget execution against the percentage of the investment's actual FY budget execution.	Percentage	Mission and Business Results - Management of Government Resources	Over target	100.000000	100.000000	98.000000	100.000000	Quarterly
Each Project in this investment will measure the number of planned	Percentage	Customer Results - Timeliness and Responsiveness	Over target	100.000000	100.000000	100.000000	100.000000	Quarterly

Table II.C.1 Performance Metrics

Metric Description	Unit of Measure	FEA Performance Measurement Category Mapping	Measurement Condition	Baseline	Target for PY	Actual for PY	Target for CY	Reporting Frequency
customer-facing deliverables per increment against the number of actual customer-facing deliverables per increment in accordance with the Program Management and Accountability System (PMAS). The project totals for customer-facing increment deliverables will be reported as a percentage for the investment as a whole.								
Total % of wristbands scanned/bypassed for Positive Patient Identification. Each one hundredth of a percent is equal to about 500 wristbands.	Percentage	Technology - Efficiency	Over target	87.410000	90.000000	94.150000	95.240000	Monthly
Each Project in this investment will measure the planned business days for increment delivery against the number of actual business days for increment delivery in accordance with the Program Management and Accountability System (PMAS).	Percentage	Process and Activities - Cycle Time and Timeliness	Over target	100.000000	100.000000	100.000000	100.000000	Quarterly